

CLAIMS

1. An electronic camera comprising:

an image-capturing element that captures an image of
a subject and outputs image data of the captured subject
5 image;

a compression processing unit that compresses the image
data by converting the image data to a spatial frequency DC
component and a spatial frequency AC component and by
quantizing and coding the two components, wherein:

10 said compression processing unit includes:

a quantization ratio determining processing unit that
determines a ratio of a DC component quantization step and
an AC component quantization step (DC/AC quantization ratio)
in correspondence to a target compression rate;

15 a quantization adjustment processing unit that makes
an adjustment on said DC component quantization step and said
AC component quantization step while sustaining the DC/AC
quantization ratio at a substantially constant value; and

a compression rate control processing unit that
20 controls said quantization adjustment processing unit so that
a compression code volume resulting from the compression can
be within a range according to a target compression rate.

2. An electronic camera according to claim 1, wherein:

25 said quantization ratio determining processing unit

adjusts the DC/AC quantization ratio to a smaller value as the target compression rate is set higher.

3. An electronic camera according to claim 1, wherein:

5 said quantization ratio determining processing unit fixes the DC/AC quantization ratio at a constant value regardless of the target compression rate when the target compression rate is set higher than a predetermined value.

10 4. An image processing program for compressing image data by quantizing and coding a DC component and an AC component, comprising:

 DCT processing in which the image data are converted to a spatial frequency DC component and a spatial frequency
15 AC component;

 quantization ratio determining processing in which a ratio of a DC component quantization step and an AC component quantization step (DC/AC quantization ratio) is determined in correspondence to a target compression rate;

20 quantization adjustment processing in which said DC component quantization step and said AC quantization step are adjusted while sustaining the DC/AC quantization ratio at a substantially constant value; and

 compression rate control processing in which control
25 is implemented on the quantization adjustment processing so

that a compression code volume resulting from the compression can be within a range according to a target compression rate.

5. A recording medium having recorded therein an image
5 processing program according to claim 4.

6. A signal that transmits an image processing program according to claim 4 through a communication line.